

# PATENT ABSTRACTS OF JAPAN

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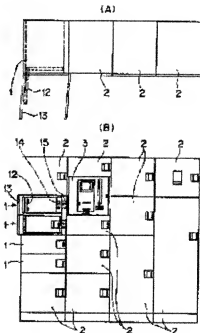
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## (54) HOME DELIVERY LOCKER DEVICE AND HOME DELIVERY LOCKER SYSTEM

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To improve crime preventive performance, and give and receive valuables such as registered mail in a home delivery locker system.

**SOLUTION:** A first kind of home delivery locker device 1 and a second kind of home delivery locker device 2 are combined with an input operation part 3. The second kind of home delivery locker device 2 is formed as an ordinary locker device. The first kind of home delivery locker device 1 has an inner door 12 and an outer door 13, and is formed as a double lock mechanism. In an inner door lock device 14 of the inner door 12 and an outer door lock device 15 of the first kind of home delivery locker device 1 and a lock device of the second kind of home delivery locker device 2, locking/unlocking is controlled by operation of the input operation part 3 and a control part. A delivery man inputs a code number and a dwelling unit number by the input operation part 3 to deposit registered main in the home delivery locker device 1. A resident inserts a registration card by the input operation part 3 to unlock the outer door 13. Next, the code number is inputted to unlock the inner door 12. A door switch is arranged in the outer door 13, and when forced opening is caused, a warning is outputted.



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CLAIMS

[Claim(s)]

[Claim 1]A locker unit for door-to-door delivery characterized by comprising the following.

A rocker box in which a collection-and-delivery thing is accommodated.

An inner door provided in an opening of this rocker box.

An inner door lock device which carries out lock/unlock of this inner door.

An outer door lock device which carries out lock/unlock of an outer door provided in the outside of this inner door, and this outer door.

[Claim 2]a locker unit for door-to-door delivery of the 1st sort, and a locker unit for door-to-door delivery of the 2nd sort -- this -- with a control section which controls lock/unlock of each door of a locker unit for door-to-door delivery of the 1st sort and the 2nd sort. It is the locker system for door-to-door delivery provided with an alter operation part which inputs information into this control section, Said locker unit for door-to-door delivery of the 1st sort is said locker unit for door-to-door delivery according to claim 1, and said control section, When satisfying conditions that the 1st information inputted from an alter operation part is regular, a locker unit for door-to-door delivery of the 2nd sort is unlocked, both [ which were inputted from an alter operation part ] the 1st information and the 2nd information -- although -- a locker system for door-to-door delivery unlocking said locker unit for door-to-door delivery of the 1st sort when satisfying regular conditions.

[Claim 3]The locker system for door-to-door delivery according to claim 2 when said locker unit for door-to-door delivery of the 1st sort is provided with door switches which detect an opened condition of said outer door, said outer door lock device of this outer door is a locked state and said door switches detect an opened condition, wherein said control section outputs an alarm.

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention is installed in collective housing, such as an apartment, and even if habitation people and a delivery person cannot meet, it relates to the locker unit for door-to-door delivery and the locker system for door-to-door delivery which can perform delivery of a collection-and-delivery thing.

[0002]

[Description of the Prior Art]Conventionally, there are some which are indicated by JP,63-21017.A, for example as this kind of a locker system for door-to-door delivery. In this locker system for door-to-door delivery, operation of a final controlling element is enabled with the delivery contractor card registered beforehand, and a delivery contractor inputs the dwelling unit number of a destination, is vacant, unlocks a locker, and stores a delivery matter. On the other hand, if habitation people check whether there is any delivery matter with the registration card registered beforehand and have a delivery matter, they will open a door wide after checking habitation people, and will receive a delivery matter.

[0003]

[Problem(s) to be Solved by the Invention]When performing a deposit of a delivery matter and operation of extraction, he checks whether you are a regular person with a registration card etc., and is trying to avoid a trouble in such a locker system for door-to-door delivery. However, from transfer of valuables, such as a registered mail, the conventional locker system for door-to-door delivery is insufficient in respect of crime prevention nature, and requires the high locker system for door-to-door delivery of crime prevention nature further. a door wrenches it open -- etc. -- only with composition which only generates an alarm when it corresponds and a door is wrenched open, when an administrator runs with an alarm, that a delivery matter is already held away also arises. To transfer of a registered mail etc., just the check by a card etc. is insufficient for avoiding a trouble, and it needs to be differentiated with the case where the usual load is delivered and received.

[0004]This invention raises crime prevention nature and makes it a technical problem to provide the locker system for door-to-door delivery which can deliver and receive valuables, such as a registered mail.

[0005]

[Means for Solving the Problem]A locker unit for door-to-door delivery of claim 1 of this invention made in order to solve the above-mentioned technical problem is provided with the following.

A rocker box in which a collection-and-delivery thing is accommodated.

An inner door provided in an opening of this rocker box.

An outer door lock device which carries out lock/unlock of an inner door lock device which carries out lock/unlock of this inner door, an outer door provided in the outside of this inner door, and this outer door.

[0006]According to the locker unit for door-to-door delivery of claim 1 constituted as mentioned above, an inner door can be locked with an inner door lock device, an outer door can be locked with an outer door lock device, it becomes a double locking mechanism, and crime prevention nature improves. If an alarm is outputted when an outer door is wrenched open, also by an output state of an alarm, an inner door will still be locked and crime prevention nature will improve further.

[0007]A locker system for door-to-door delivery of claim 2 of this invention, a locker unit for door-to-door delivery of the 1st sort, and a locker unit for door-to-door delivery of the 2nd sort -- this -- with a control section which controls lock/unlock of each door of a locker unit for door-to-door delivery of the 1st sort and the 2nd sort. It is the locker system for door-to-door delivery provided with an alter operation part which inputs information into this control section, Said locker unit for door-to-door delivery of the 1st sort is said locker unit for door-to-door delivery according to claim 1, and said control section, both [ which unlocked a locker unit for

door-to-door delivery of the 2nd sort when satisfying conditions that the 1st information inputted from an alter operation part is regular, and was inputted from an alter operation part ] the 1st information and the 2nd information — although — when satisfying regular conditions, said locker unit for door-to-door delivery of the 1st sort is unlocked

[0008]According to the locker system for door-to-door delivery of claim 2 constituted as mentioned above, the 1st information that is satisfied with using a locker unit for door-to-door delivery of the 2nd sort for transfer of the usual load of regular conditions from an alter operation part is only inputted, namely, a load can be delivered and received only by one alter operation. By what a locker unit for door-to-door delivery of the 1st sort is used for transfer of a registered mail etc. for. Since it does not unlock unless both the 1st information and the 2nd information satisfy regular conditions, transfer of the usual load and transfer of a registered mail etc. can be differentiated, and this locker unit for door-to-door delivery of the 1st sort becomes that whose crime prevention nature improved like claim 1 further.

[0009]A locker system for door-to-door delivery of claim 3 of this invention. It has composition of claim 2 and said locker unit for door-to-door delivery of the 1st sort is provided with door switches which detect an opened condition of said outer door, and said control section outputs an alarm, when said outer door lock device of this outer door is a locked state and said door switches detect an opened condition.

[0010]Since according to the locker system for door-to-door delivery of claim 3 constituted as mentioned above, an alarm is outputted when an outer door is wrenched open while the same operation effect as claim 2 is obtained, also by an output state of an alarm, an inner door will still be locked and crime prevention nature improves further.

[0011]

[Embodiment of the Invention]Hereafter, one embodiment of this invention is described with reference to drawings. Drawing 1 is the plan (drawing 1 (A)) and front view (drawing 1 (B)) of the locker system for door-to-door delivery which used the locker unit for door-to-door delivery of the embodiment of this invention. This locker system for door-to-door delivery combines several locker units for door-to-door delivery with which height differs so that it may correspond to the various sizes of the article to store. The locker unit 2 for door-to-door delivery of the 2nd sort which the four locker units 1 for door-to-door delivery of the 1st sort used for transfer of a registered mail etc. in the middle of a left side end toward a transverse plane are allocated, in addition is used for transfer of the usual delivery load, cleaning garments, etc., and the alter operation part 3 of the approximately center upper part are allocated. This locker unit for door-to-door delivery is installed in the entrance hall of an apartment.

[0012]Drawing 2 is a flat-surface sectional view of the locker unit 1 for door-to-door delivery of the 1st sort, and drawing 3 is a front view of the locker unit 1 for door-to-door delivery of the 1st sort. Drawing 3 shows two sets and the state in which the upper row opened both the inner door 12 and the outer door 13, and the state where the lower berth shut the inner door 12 and the outer door 13 was opened are shown. The rocker box 11 attaches the inner case 11b in the outer case 11a, and the end is attached to the inner door 12 by opening 11b-1 of the transverse plane of the inner case 11b with the hinge 12a. The end is attached to the outer door 13 by opening 11a-1 of the transverse plane of the outer case 11a with the hinge 13a. Thereby, the inner door 12 and the outer door 13 are drawing 2 and drawing 1 (A). As the two-dot chain line showed, opening and closing have become free.

[0013]The inner door lock device 14 is allocated by the hinge 12a of the inner case 11b, and the open end of the opposite hand, This inner door lock device 14 equips the inside with a ratchet mechanism, a solenoid, etc., makes the striker 12b attached to the inner end of the inner door 12 engage with a latch plate etc., and switches and holds a locked state and an unlocked state electrically by a solenoid. The outer door lock device 15 is allocated by the hinge 13a of the outer case 11a, and the open end of the opposite hand, This outer door lock device 15 equips the inside with a ratchet mechanism, a solenoid, etc., makes the striker 13b attached to the inner end of the outer door 13 engage with a latch plate etc., and switches and holds a locked state and an unlocked state electrically by a solenoid. The door switches 16 for detecting whether it is in the state which the outer door 13 was able to open, or it is in the closed state are allocated by the outer door lock device 15.

[0014]In bottom plate 11a-2 of the center of an inside of the outer case 11a. The optical sensor 17 which detects the existence of an article is allocated, window hole 11b-3 of a rectangle is formed in bottom plate 11b-2 of the center of an inside of the inner case 11b, and the optical sensor 17 detects the existence of the article in the rocker box 11 via this window hole 11b-3.

[0015]To the inner door lock device 14 and the outer door lock device 15. As shown in drawing 3, the cylinder lock 14a and 15a for urgent unlockings is formed, respectively, insertion of a key is attained by removing the handles 12c and 13c, and such cylinder lock 14a and 15a is unlocked with a master key in an emergency.

[0016]Except for that there is no portion concerning [ although the locker unit 1 for door-to-door delivery of the 1st sort was explained ] the inner case 11b and the inner door 12, and these in the locker unit 2 for door-to-door delivery of the 2nd sort, and the point that height differs, the above is the same structure as the locker unit 1 for door-to-door delivery of the 1st sort, and is \*\*.

[0017]Drawing 4 is a front view of the alter operation part 3, When the touch panel 31 and inhabitant whom the alter operation part 3 equipped with the LCD display perform receipt operation. So that the usage fee etc. of the printer 33 which publishes receipts, such as the magnetic card reader 32 and receipt which are alike and insert a registration card (magnetic card), a registered mail delivery slip or an absent delivery slip, and a locker can be paid by an IC card. When people stand before IC card reader 34 for carrying out, and the alter operation part 3, it has the power-saving sensor 35 for turning on the touch panel 31 and performing power saving. The control section which gives the below-mentioned explanation is allocated in the back side of the alter operation part 3.

[0018]Drawing 5 is a block diagram of an embodiment and the control section 10 comprises a microcomputer etc. The inner door lock device 14, the outer door lock device 15, the door switches 16, and the optical sensor 17 of the locker unit 1 for door-to-door delivery of the each 1st sort are connected to the control section 10, and the outer door lock device 15, the door switches 16, and the optical sensor 17 of the locker unit 2 for door-to-door delivery of the each 2nd sort are connected to it. The touch panel 31 of the alter operation part 3, the magnetic card reader 32, the printer 33, IC card reader 34, and the power-saving sensor 35 are connected to the control section 10. A screen switch is displayed on the touch panel 31, and various operation switches, such as a ten key, are constituted so that operation of the screen switch may detect input.

[0019]And the control section 10 performs processing which incorporates the input process by the control and the screen switch of a display of the touch panel 31, reading of the data from the magnetic card reader 32, the output of the data to the printer 33, transfer of data with IC card reader 34, and the output of the power-saving sensor 35. Processing which incorporates control of the lock/unlock of the inner door lock device 14 and the outer door device 15 and the output of the door switches 16 or the optical sensor 17 is performed.

[0020]In this embodiment, if the door switches 16 are turned on, an interrupt signal will be inputted into CPU of the control section 10, and will output an alarm by interrupt processing, but. To this interrupt processing, an interruption permission and an interrupt inhibit control CPU, and only when it is an interruption permission, it performs interrupt processing and outputs an alarm.

[0021]According to this embodiment, an authentication number is assigned to the specified carrier, and this authentication number is beforehand set as the memory inside the control section 10, and is memorized. A registration card is passed to every house of the apartment, and the ID code and dwelling unit number of the registration card are matched, and it is beforehand set as a memory and memorizes. A password is memorized, and the password and a corresponding dwelling unit number match the inhabitant of every house, and he sets it as a memory beforehand and is remembered. The ID code of each registration card is a mutually different code.

[0022]Drawing 6 - drawing 9 are flow charts which show the important section of the control program executed by CPU of the control section 10, and explain operation of an embodiment based on the figures. If the screen which will choose a carrier's operation or an inhabitant's operation if it supervises whether the power-saving sensor 35 is turned on and the power-saving sensor 35 is turned on by a power turn is displayed and a carrier's operation is chosen on this screen, drawing 6 will be processed, and drawing 8 will be processed if an inhabitant's operation is chosen. It returns to the state (it is called henceforth "an initial waiting state") of supervising whether a screen being turned OFF and the power-saving sensor 35 being turned on in this selection picture if operation does not have predetermined time.

[0023]Drawing 6 and drawing 7 mainly show processing in case a delivery person delivers a registered mail, and perform first the display to which selection of the kind of delivery or the kind of receipt thing is urged at Step S1. In this embodiment, each screen switch of a "report", a "request-to-print-out-files report", "taking over", "cleaning", and "registered mail delivery" is displayed, and it stands by. At Step S1, if there is no operation into predetermined time, it will return to an initial waiting state.

[0024]If it judges which screen switch was operated at Step S2 when there was operation of a screen switch and "registered mail delivery" is chosen, it will progress to step S4, and if other processings are chosen, processing according to each screen switch will be performed at Step S3, and it will return to an initial waiting state.

Hereafter, processing of "registered mail delivery" is explained in detail. By step S4, it judges whether there is any useable empty box (rocker box), and if there is nothing, "a display box in use [ all ]" will be performed at Step S5, and it will return to an initial waiting state. If there is an empty box, at Step S6, the screen switch of the display of "please input an authentication number" and a ten key will be displayed, and it will stand by. At Step S6, if there is no input of a number into predetermined time, it will return to an initial waiting state.

[0025]if it is a number which whether it is the number into which the inputted authentication number is registered (memory) judges, and is not registered at Step S7 when there is an input of an authentication number — Step S8 — “— a number difference — please reinput —” — it displays and returns to Step S6. At Step S7, if the inputted authentication number is a number registered, by step S9, the screen switch of the display of “please input the dwelling unit number of a destination” and a ten key will be displayed, and it will stand by. If there is no input of a number into predetermined time at step S9, it will return to an initial waiting state.

[0026]At Step S10, if there is an input of a dwelling unit number, if it judges whether there is any dwelling unit applicable to the inputted dwelling unit number and there is no applicable dwelling unit, it will express “please be number-different and reinput” as Step S11, and will return to step S9. If there is a dwelling unit which corresponds to the inputted dwelling unit number at Step S10, at Step S12. Whether the ID code of the registration card of the specified dwelling unit and the password corresponding to it are registered judges, and if not registered, it expresses “the report thing to the specified dwelling unit cannot keep” as Step S13, and returns to Step S1.

[0027]If the ID code of a registration card and the corresponding password are registered at Step S12, at Step S14 of drawing 7. If the dwelling unit judges whether it is registered [ \*\*\*\*\* ] and registered “while absent over a long period of time”, it will express “since a receiver’s address is among absent over a long period of time, it cannot keep” as Step S15, and will return to Step S1. At Step S16, if it is not registered [ \*\*\*\*\* ] “while absent over a long period of time”, while displaying the screen switch of the box number of the locker unit 1 for door-to-door delivery of the 1st sort which is an empty box, it indicates “choose a box” and stands by. At Step S16, if there is no selection (operation of a screen switch) of a box into predetermined time, it will return to Step S1.

[0028]If a box is chosen at Step S16, interrupt processing by one of the door switches 16 will be forbidden, the selected outer door lock device 15 and the inner door lock device 14 of a box will be controlled by Step S17, and it will unlock, respectively, and will express “please put in a load and shut a door” as Step S18. And if it supervises whether switching operation of the door was performed in predetermined time by the state of the door switches 16 and switching operation is not performed in predetermined time at Step S19, at Step S20. The outer door lock device 15 and the inner door lock device 14 are controlled, it locks, respectively, interrupt processing by one of the door switches 16 is permitted, and it returns to Step S1.

[0029]If the switching operation of a door occurs in predetermined time, it judges whether the load is contained based on the output of the optical sensor 17 at Step S21, and the load is not contained, it returned to Step S18 and the load is contained. The inner door lock device 14 and the outer door lock device 15 are locked at Step S22, interrupt processing by one of the door switches 16 is permitted, and it progresses to Step S23. While memorizing in a memory that the specified dwelling unit number had registered mail delivery in Step S23. The display “under receipt printing” is performed, a receipt (in this case, a receipt and a registered mail delivery slip) is printed with the printer 32, at Step S24, it indicates “take a receipt”, predetermined time standby is carried out, and it returns to Step S1.

[0030]The delivery person can deposit a registered mail with the locker unit 1 for door-to-door delivery of the 1st sort as mentioned above, and it puts into the mailbox etc. of the dwelling unit which specified the registered mail delivery slip. And the inhabitant can check that registered mail delivery has been made by a registered mail delivery slip. Even if an inhabitant does not look at a registered mail delivery slip, he can check the existence of delivery with a registration card, so that it may explain below.

[0031]The processing to which a “report” and a “request-to-print-out-files report” deposit the usual load in the locker unit 2 for door-to-door delivery of the 2nd sort. The processing with which, as for “taking over”, a delivery dealer etc. receive the load which received connection beforehand from the locker unit 2 for door-to-door delivery of the 2nd sort. “Cleaning” is processing with which a cleaning business company receives the garments which received connection beforehand from the locker unit 2 for door-to-door delivery of the 2nd sort, and is the processing which lost the processing about the inner door lock device 4 of drawing 7.

[0032]Drawing 8 and drawing 9 mainly show processing in case an inhabitant performs the receipt of a registered mail, first, are Step S31 and perform the display to which the kind of deposit, the kind of receipt thing, or selection of setting operation is urged. In this embodiment, each screen switch of “\*\*\*\*\*”, a “request to print out files”, “a dispatch request”, “absence setting”, “cleaning”, and “registered mail receipt” is displayed, and it stands by. At Step S31, if there is no operation into predetermined time, it will return to an initial waiting state.

[0033]If it judges which screen switch was operated at Step S32 when there was operation of a screen switch and “registered mail receipt” is chosen, it will progress to Step S34, and if other processings are chosen, processing according to each screen switch will be performed at Step S33, and it will return to an initial waiting state.

Hereafter, processing of “registered mail receipt” is explained in detail. At Step S34, it indicates “insert a registration card” and stands by. If the ID code of a registration card is not detected by the magnetic card reader

32 in predetermined time at Step S34, it returns to an initial waiting state.

[0034]If an ID code is detected from a registration card, and it judges whether the registered mail of the applicable dwelling unit of an ID code is kept and has not kept at Step S35, it expresses "there is no report thing" as Step S36, and returns to an initial waiting state. At Step S37, if it has kept, while displaying the screen switch of the box number of the box (locker unit 1 for door-to-door delivery of the 1st sort) which has kept registered mail, it will indicate "choose a box" and will stand by. At Step S37, if there is no selection (operation of a screen switch) of a box into predetermined time, it will return to Step S31.

[0035]If a box is chosen at Step S37, the inner door lock device 14 of the selected box is controlled by Step S38, and the inner door 12 is unlocked, and at Step S39, the screen switch of the display of "please input a password" and a ten key will be displayed, and it will stand by. At Step S39, if there is no input of a number into predetermined time, the inner door lock device 14 will be locked, and it returns to an initial waiting state.

[0036]if it is a number which whether it is the password into which the inputted password is registered (memory) judges, and is not registered at Step S40 when there is an input of a password -- Step S41 -- "a number difference -- please reinput --" -- it displays and returns to Step S39. If the inputted password is a number registered, interrupt processing by one of the door switches 16 will be forbidden, the outer door lock device 15 of the selected box will be controlled by Step S42 of drawing 9, the outer door 13 will be unlocked, and it will express "please open a door and take a load" as Step S40. And if it supervises whether switching operation of the door was performed in predetermined time by the state of the door switches 16 and switching operation is not performed in predetermined time at Step S43, at Step S44. The outer door lock device 15 and the inner door lock device 14 are controlled, it locks, respectively, interrupt processing by one of the door switches 16 is permitted, and it returns to Step S31.

[0037]If it judged whether the load would be contained based on the output of the optical sensor 17 at Step S45 if the switching operation of a door occurs in predetermined time, and the load is contained, it returns to Step S43 and the load is not contained, At Step S46, the inner door lock device 14 and the outer door lock device 15 are locked, interrupt processing by one of the door switches 16 is permitted, predetermined time standby is carried out, and it returns to Step S31.

[0038]The inhabitant can receive a registered mail from the locker unit 1 for door-to-door delivery of the 1st sort as mentioned above. Thus, when the ID code (the 1st information) and password (the 2nd information) of a registration card are in agreement with the information on the deposited dwelling unit, the locker unit 1 for door-to-door delivery of the 1st sort is unlocked (when satisfying regular conditions).

[0039]The processing with which a "receipt" and a "request to print out files" receive the usual load from the locker unit 2 for door-to-door delivery of the 2nd sort. The processing which deposits a load in the locker unit 2 for door-to-door delivery of the 2nd sort in order to connect "the dispatch request" to the delivery dealer etc. beforehand and to have a load received, In order that "cleaning" may be beforehand connected to the cleaning business company and may have garments of cleaning received, it is processing which deposits garments in the locker unit 2 for door-to-door delivery of the 2nd sort, and it is the processing which lost the processing about the password of drawing 8. That is, when in agreement with the ID code of the dwelling unit with which the ID code was deposited by use of the registration card when using these locker units 2 for door-to-door delivery of the 2nd sort, it unlocks.

[0040]If drawing 10 is a flow chart of interrupt processing by the door switches 16 and an interrupt occurs, If it judges whether interruption is permitted at Step S51, and interruption is not permitted, it returns to the original routine and interruption is permitted, at Step S52. It checks whether the outer door 13 is an opened state with the door switches 16, if it is not an opened state, it will return to the original routine, and if it is an opened state, an alarm will be generated at Step S53, the inner door lock device 14 is controlled by Step S54, the inner door 12 is locked, and it returns to the original routine. By this, when the locker unit 1 for door-to-door delivery of the 1st sort is an unlocked state, an alarm is not outputted (when it is an interrupt inhibit), but an alarm is outputted for the locker unit 1 for door-to-door delivery of the 1st sort only to a locked state (when it is an interruption permission). Therefore, an alarm will be outputted if the outer door 13 is unjustly wrenched open. If the outer door 13 is unjustly wrenched open even when the inner door 12 is unlocked with the registration cards (for example, gathered card) which came to hand unjustly, for example, an alarm will be outputted while way locking of the inner door 12 is carried out immediately. Therefore, crime prevention nature improves. This alarm is notified to the management office, a commissioned company, etc.

[0041]Although he is trying to control unlocking by the registration card and a password, when satisfying the conditions that two operations are regular, as long as it unlocks the locker unit 1 for door-to-door delivery of the 1st sort, what kind of thing may be sufficient as the conditions for controlling unlocking in an above embodiment?

[0042]When an outer door is wrenched open, he is trying to output an alarm, but since it has double locking structure of an outer door and an inner door even if it does not output an alarm, crime prevention nature improves conventionally.

[0043]Although illustrated about the case where an alter operation part is a touch panel, it cannot be overemphasized that other operation switches etc. may be used.

[0044]Each number, layouts, sizes, or shape of the locker unit 1 for door-to-door delivery of the 1st sort and the locker unit 2 for door-to-door delivery of the 2nd sort, etc. are not limited to an embodiment.

[0045]

[Effect of the Invention]As explained above, according to the locker unit for door-to-door delivery of claim 1 of this invention, it becomes a double locking mechanism and crime prevention nature improves. If an alarm is outputted when an outer door is wrenched open, also by the output state of an alarm, the inner door will still be locked and crime prevention nature will improve further.

[0046]According to the locker system for door-to-door delivery of claim 2 of this invention, the 1st information that is satisfied with using the locker unit for door-to-door delivery of the 2nd sort for transfer of the usual load of regular conditions from an alter operation part is only inputted, namely, a load can be delivered and received only by one alter operation. By what the locker unit for door-to-door delivery of the 1st sort is used for transfer of a registered mail etc. for. Since it does not unlock unless both the 1st information and the 2nd information satisfy regular conditions, transfer of the usual load and transfer of a registered mail etc. can be differentiated, and this locker unit for door-to-door delivery of the 1st sort becomes that whose crime prevention nature improved like claim 1 further.

[0047]Since according to the locker system for door-to-door delivery of claim 3 of this invention an alarm is outputted when an outer door is wrenched open while the same operation effect as claim 2 is obtained, also by the output state of an alarm, the inner door will still be locked and crime prevention nature improves further.

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[Translation done.]



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CORRECTION OR AMENDMENT

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[Amendment 1]  
[Document to be Amended]Specification  
[Item(s) to be Amended]0020  
[Method of Amendment]Change  
[The contents of amendment]  
[0020]

In this embodiment, if the door switches 16 are turned on, an interrupt signal will be inputted into CPU of the control section 10, and will output an alarm by interrupt processing, but. To this interrupt processing, an interruption permission and an interrupt inhibit are controlled, interrupt processing is performed only at the time of an interruption permission, and CPU outputs an alarm.

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[Translation done.]